and cost conditions applied in Italy, the use of DMF is economically sustainable for the NHS. Plausibly, the introduction and usage of this new therapy in RRMS patients will ensure clinical benefits for patients without resulting in additional costs for the NHS.

PRM103

QUANTITATIVE ASSESSMENT OF THERAPEUTIC VALUE OF INNOVATIVE MEDICAL TECHNOLOGIES: METHODOLOGY AND PRELIMINARY RESULTS

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**OBJECTIVES:** Ministry of Health of Russian Federation announced the support of innovative development of pharmaceutical industry. In accordance with these plans, we aimed to develop a methodology for quantitative assessment of therapeutic value of innovative medical technologies in a multi-criteria decision analysis manner. **METHODS:** The questionnaire was developed during pilot survey (10 experts). Then 248 respondents assessed criteria significance (weights) of 14 features of an innovative drug and 7 features of a relevant disease. Also they estimated scale's values. The respondents were medical practitioners and decision makers in healthcare. Results of the survey were analyzed using statistical methods. **RESULTS:** The most valuable features are clinical efficacy and clinical safety with the weights of 9.77% and 9.08%, respectively. Absence of effective treatment of the disease, mortality and influence on quality of life also are among the valuable features with the weights of 8.08%, 7.72% and 7.47%, respectively. Minimal weights have new manufacturing technique of the drug (0.69%) and new drug formulation (0.03%). **CONCLUSIONS:** Significant and non-significant features of an innovative medical technology and disease for which it is intended in terms of therapeutic value were identified. We plan to optimize set of criteria and scales and then to assess reliability and validity of the developed instrument. This methodology being incorporated in the system of evaluation of medical technologies and combined with other methods of analyses will help decision-making regarding innovative drugs in Russia become more harmonious and transparent.

PRM104

EIGHT WAYS TO IMPROVE THE INTERPRETATION AND REPORTING OF COST-EFFECTIVENESS ANALYSES OF SCREENING INTERVENTIONS

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**OBJECTIVES:** The cost-effectiveness of screening interventions is typically examined using simulation models. These permit comparisons of multiple screening strategies. Cost-effectiveness estimates from such models depend, in part, on what alternatives analysts choose to compare and how the simulation results are interpreted. Sometimes the comparisons and interpretations made are inappropriate, which can obscure evidence and lead to the wrong policy conclusions. The objective of this study is to explain eight simple steps that analysts can take to avoid these problems. **METHODS:** We use examples from the literature to show how these problems can arise and to explain how they can be avoided. The examples chosen are from a recent systematic review of the cost-effectiveness of cervical screening. **RESULTS:** The eight recommendations are: (i) report costs and effects, rather than just incremental cost-effectiveness ratios (ICERs); (ii) present a cost-effectiveness plane; (iii) report cost and effects for all strategies, not just those on the efficient frontier; (iv) do not report ICERs for dominated strategies; (v) report costs and effects to sufficient significant figures; (vi) include all simulated strategies in the basecase analysis; (vii) do not report ICERs for strategies for which it is anticipated the inclusion of additional strategies would lead to significant changes in the estimated ratio; (viii) when there are multiple factors to vary in a screening programme, only vary these factors one at a time when creating alternative strategies. **CONCLUSIONS:** The cost-effectiveness estimates from simulation models are particularly dependent on the choices taken by analysts regarding both the modelling of alternatives and the interpretation of the cost and effects estimates. Although the analytical flaws informing our recommendations might seem obvious, they occur with surprising frequency in the literature. The simple eight-item list presented here will support better use of screening models in identifying optimal policy choices.

PRM105

IMPACT OF GREXIT ON PHARMACEUTICAL PRICING: AN INTERNATIONAL REFERENCE PRICING ANALYSIS

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**OBJECTIVES:** The possibility of Greece leaving the European Union (Grexit) is well-publicized, but its impact on the pharmaceutical industry has not been fully determined. Majority of established markets use pricing rules that reference products both across (international reference pricing; IRP) and within (therapeutic reference pricing; TRP) country-lines. IRP and TRP are used as effective measures to control price of pharmaceutical products. There is a growing need to understand how Grexit will impact these mechanisms through direct or indirect means. **METHODS:** Navigant's Price and Revenue Impact Simulation Model (PRISM), which simulates the impact of IRP and TRP, as well as parallel trade and generic entry, was used to quantitatively assess the impact on drug prices across 50 markets in the EU, North America, Latam, MENA-CIS and Asia. Respiratory products were analysed as a class to prevent a biased analysis towards particular pharmaceutical companies. Two potential scenarios were analysed with respect to Grexit: Markets referencing Greece switch referencing to Slovakia, a replacement low-priced Euro currency Mandatory price cut in Greece resulting from a currency shift to the Greek Drachma **RESULTS:** Outputs of the analysis include impact on price, revenue and net present value as well as parallel trade of the respiratory product class. Using a dynamic price development graph, the model provides explanations for price changes at re-referencing time-points. The model clearly demonstrates that Greece leaving the EU will have a significant impact on price and revenue across markets, demonstrating the spill-over caused by international referencing. **CONCLUSIONS:** The impact of Grexit goes well beyond Greece, directly affecting pharmaceutical price and revenue throughout Europe. PRISM can be used to assist manufacturers in developing a comprehensive pricing strategy and facilitate dialog with governments operating within fiscally constrained environments. The model can also be used to test future scenarios as emerging markets are increasingly adopting reference pricing.

PRM106

DEVELOPMENT OF A CONCEPTUAL MODEL OF MULTIPLE MYELOMA FOR USE IN ECONOMIC MODELLING: A SYSTEMATIC LITERATURE REVIEW TO IDENTIFY THE EVIDENCE BASE

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**OBJECTIVES:** This study sought to identify disease- and patient-specific characteristics impacting on disease progression and outcomes, and to determine key attributes to be used in developing a conceptual model of multiple myeloma (MM). **METHODS:** English language studies reporting MM attributes and their association with disease progression and outcomes were identified from Embase and Medline (2004–2014) and congress abstracts (2012–2014) in a systematic literature review (SLR). A second SLR of treatment guidelines, economic models, health technology reports and studies on the burden of MM was also used. An attribute was defined as a metric or characteristic of MM that plays a potential role in the disease process. These attributes can be explanatory (e.g. patient characteristics) or dependant (e.g. survival). **RESULTS:** From both SLRs, 95 MM attributes were identified. These were grouped into disease characteristics (e.g. light chains, International Staging System [ISS] stage, bone marrow plasma cells, extramedullary disease, karyotypic abnormalities), genetic factors [e.g. t(4;14), del(13p), del(17p), hypodiploidy, hyperdiploidy], patient characteristics (e.g. age, serum lactate dehydrogenase, gender, Eastern Cooperative Oncology Group performance status, comorbidities), outcomes (e.g. overall survival), quality of life and symptoms (e.g. pain, fatigue, weakness, bone fractures, infection). Attributes were then categorised as explanatory or dependent variables. Age, serum lactate dehydrogenase, light chains and M protein were among the most common explanatory variables in the literature. The most commonly reported dependent variable was overall survival, followed by quality of life. None of the studies presented a comprehensive set of determinants of disease progression and outcomes. **CONCLUSIONS:** MM is a heterogeneous condition and it is not yet clear which attributes play a key role in determining disease progression and survival. The next step in developing the conceptual model for MM is to ask physicians to validate the potential attributes identified and to clarify the relationships between validated attributes.

PRM107

SIMULATING INDIVIDUAL PATIENT LEVEL DATA USING AN ILLNESS-DEATH MODELLING FRAMEWORK IN ORDER TO ADJUST FOR TREATMENT SWITCHING WHEN ONLY SUMMARY DATA ARE AVAILABLE

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**OBJECTIVES:** Treatment switching commonly occurs in the pivotal HTA evidence for advanced or metastatic cancer treatments submitted to reimbursement agencies. Simple approaches, such as Intention-to-treat (ITT) analysis, have typically been applied to data with treatment switching, despite simulation studies showing these to drastically underestimate the underlying treatment effect. Therefore, before these studies are included in secondary analyses, the data must be re-analysed appropriately. When only summary data are available, individual patient level data can be reconstructed using a simulation approach. Given patients switch on disease progression, their progression time is assumed equivalent to their switch time. Simulating this effectively requires an illness-death modelling framework; the process of which is the aim of this research. **METHODS:** An example was used, where Kaplan-Meier curves for all three transition rates were available. The coordinates were extracted digitally from these scanned survival curves, and used to model the times for each transition. Many datasets were created, where the times for the transitions were simulated from the respective models. ITT summary statistics were calculated for each dataset; then averaged over. Examples with increasingly less information on which to estimate the transition rates were also systematically investigated. **RESULTS:** When information on transition rates is available, the process is easy to implement; giving data that are, on average, broadly representative of the original dataset with median survival times and overall survival hazard ratio differing by less than 10% and 0.05 respectively. As the information becomes more limited, the process requires additional assumptions, and ultimately may not be feasible. **CONCLUSIONS:** Using an illness-death modelling framework to simulate individual patient level data is affected by the information available to the analyst. However, this approach is important, when addressing treatment switching where only summary data are available, as the relationship between time to progression and overall survival is modelled correctly.

PRM108

MARKOV MODELING OF HIV INFECTION IN RUSSIAN POPULATION

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**OBJECTIVES:** Over the past five years, the prevalence and incidence of HIV in Russian Federation have increased dramatically. The application of global Markov models,